



## SEQUENCE LISTING

<110> Doweyko, Arthur M.P.  
Nadler, Steven G.  
<120> Compositions and Methods Involving Nuclear Hormone Receptor Site II  
<130> D0250 NP  
<140> 10/621,807  
<141> 2003-07-17  
<150> 60/396,907  
<151> 2002-07-18  
<160> 21  
<170> PatentIn version 3.3  
<210> 1  
<211> 255  
<212> PRT  
<213> Homo sapiens  
<400> 1

Ala Thr Leu Pro Gln Leu Thr Pro Thr Leu Val Ser Leu Leu Glu Val  
1 5 10 15

Ile Glu Pro Glu Val Leu Tyr Ala Gly Tyr Asp Ser Ser Val Pro Asp  
20 25 30

Ser Thr Trp Arg Ile Met Thr Thr Leu Asn Met Leu Gly Gly Arg Gln  
35 40 45

Val Ile Ala Ala Val Lys Trp Ala Lys Ala Ile Pro Gly Phe Arg Asn  
50 55 60

Leu His Leu Asp Asp Gln Met Thr Leu Leu Gln Tyr Ser Trp Met Phe  
65 70 75 80

Leu Met Ala Phe Ala Leu Gly Trp Arg Ser Tyr Arg Gln Ser Ser Ala  
85 90 95

Asn Leu Leu Cys Phe Ala Pro Asp Leu Ile Ile Asn Glu Gln Arg Met  
100 105 110

Thr Leu Pro Cys Met Tyr Asp Gln Cys Lys His Met Leu Tyr Val Ser  
115 120 125

Ser Glu Leu His Arg Leu Gln Val Ser Tyr Glu Glu Tyr Leu Cys Met  
130 135 140

Lys Thr Leu Leu Leu Ser Ser Val Pro Lys Asp Gly Leu Lys Ser  
145 150 155 160

Gln Glu Leu Phe Asp Glu Ile Arg Met Thr Tyr Ile Lys Glu Leu Gly  
165 170 175

Lys Ala Ile Val Lys Arg Glu Gly Asn Ser Ser Gln Asn Trp Gln Arg  
180 185 190

Phe Tyr Gln Leu Thr Lys Leu Leu Asp Ser Met His Glu Val Val Glu  
195 200 205

Asn Leu Leu Asn Tyr Cys Phe Gln Thr Phe Leu Asp Lys Thr Met Ser  
210 215 220

Ile Glu Phe Pro Glu Met Leu Ala Glu Ile Ile Thr Asn Gln Ile Pro  
225 230 235 240

Lys Tyr Ser Asn Gly Asn Ile Lys Lys Leu Leu Phe His Gln Lys  
245 250 255

<210> 2  
<211> 251  
<212> PRT  
<213> Homo sapiens

<400> 2

Gln Leu Ile Pro Pro Leu Ile Asn Leu Leu Met Ser Ile Glu Pro Asp  
1 5 10 15

Val Ile Tyr Ala Gly His Asp Asn Thr Lys Pro Asp Thr Ser Ser Ser  
20 25 30

Leu Leu Thr Ser Leu Asn Gln Leu Gly Glu Arg Gln Leu Leu Ser Val  
35 40 45

Val Lys Trp Ser Lys Ser Leu Pro Gly Phe Arg Asn Leu His Ile Asp  
50 55 60

Asp Gln Ile Thr Leu Ile Gln Tyr Ser Trp Met Ser Leu Met Val Phe  
65 70 75 80

Gly Leu Gly Trp Arg Ser Tyr Lys His Val Ser Gly Gln Met Leu Tyr  
85 90 95

Phe Ala Pro Asp Leu Ile Leu Asn Glu Gln Arg Met Lys Glu Ser Ser  
100 105 110

Phe Tyr Ser Leu Cys Leu Thr Met Trp Gln Ile Pro Gln Glu Phe Val  
115 120 125

Lys Leu Gln Val Ser Gln Glu Glu Phe Leu Cys Met Lys Val Leu Leu  
130 135 140

Leu Leu Asn Thr Ile Pro Leu Glu Gly Leu Arg Ser Gln Thr Gln Phe  
145 150 155 160

Glu Glu Met Arg Ser Ser Tyr Ile Arg Glu Leu Ile Lys Ala Ile Gly  
165 170 175

Leu Arg Gln Lys Gly Val Val Ser Ser Gln Arg Phe Tyr Gln Leu  
180 185 190

Thr Lys Leu Leu Asp Asn Leu His Asp Leu Val Lys Gln Leu His Leu  
195 200 205

Tyr Cys Leu Asn Thr Phe Ile Gln Ser Arg Ala Leu Ser Val Glu Phe  
210 215 220

Pro Glu Met Met Ser Glu Val Ile Ala Ala Gln Leu Pro Lys Ile Leu  
225 230 235 240

Ala Gly Met Val Lys Pro Leu Leu Phe His Lys  
245 250

<210> 3  
<211> 238  
<212> PRT  
<213> Homo sapiens

<400> 3

Ser Ala Asn Glu Asp Met Pro Val Glu Arg Ile Leu Glu Ala Glu Leu  
1 5 10 15

Ala Val Glu Pro Lys Thr Glu Thr Tyr Val Glu Ala Asn Met Gly Leu  
20 25 30

Asn Pro Ser Ser Pro Asn Asp Pro Val Thr Asn Ile Cys Gln Ala Ala  
35 40 45

Asp Lys Gln Leu Phe Thr Leu Val Glu Trp Ala Lys Arg Ile Pro His  
50 55 60

Phe Ser Glu Leu Pro Leu Asp Asp Gln Val Ile Leu Leu Arg Ala Gly  
65 70 75 80

Trp Asn Glu Leu Leu Ile Ala Ser Phe Ser His Arg Ser Ile Ala Val  
85 90 95

Lys Asp Gly Ile Leu Leu Ala Thr Gly Leu His Val His Arg Asn Ser  
100 105 110

Ala His Ser Ala Gly Val Gly Ala Ile Phe Asp Arg Val Leu Thr Glu  
115 120 125

Leu Val Ser Lys Met Arg Asp Met Gln Met Asp Lys Thr Glu Leu Gly  
130 135 140

Cys Leu Arg Ala Ile Val Leu Phe Asn Pro Asp Ser Lys Gly Leu Ser  
145 150 155 160

Asn Pro Ala Glu Val Glu Ala Leu Arg Glu Lys Val Tyr Ala Ser Leu  
165 170 175

Glu Ala Tyr Cys Lys His Lys Tyr Pro Glu Gln Pro Gly Arg Phe Ala  
180 185 190

Lys Leu Leu Leu Arg Leu Pro Ala Leu Arg Ser Ile Gly Leu Lys Cys  
195 200 205

Leu Glu His Leu Phe Phe Lys Leu Ile Gly Asp Thr Pro Ile Asp  
210 215 220

Thr Phe Leu Met Glu Met Leu Glu Ala Pro His Gln Met Thr  
225 230 235

<210> 4  
<211> 238  
<212> PRT  
<213> Homo sapiens

<400> 4

Leu Ser Pro Gln Leu Glu Glu Leu Ile Thr Lys Val Ser Lys Ala His  
1 5 10 15

Gln Glu Thr Phe Pro Ser Leu Cys Gln Leu Gly Lys Tyr Thr Thr Asn  
20 25 30

Ser Ser Ala Asp His Arg Val Gln Leu Asp Leu Gly Leu Trp Asp Lys  
35 40 45

Phe Ser Glu Leu Ala Thr Lys Cys Ile Ile Lys Ile Val Glu Phe Ala  
50 55 60

Lys Arg Leu Pro Gly Phe Thr Gly Leu Ser Ile Ala Asp Gln Ile Thr  
65 70 75 80

Leu Leu Lys Ala Ala Cys Leu Asp Ile Leu Met Leu Arg Ile Cys Thr  
85 90 95

Arg Tyr Thr Pro Glu Gln Asp Thr Met Thr Phe Ser Asp Gly Leu Thr  
100 105 110

Leu Asn Arg Thr Gln Met His Asn Ala Gly Phe Gly Pro Leu Thr Asp  
115 120 125

Leu Val Phe Ala Phe Ala Gly Gln Leu Leu Pro Leu Glu Met Asp Asp  
130 135 140

Thr Glu Thr Gly Leu Leu Ser Ala Ile Cys Leu Ile Cys Gly Asp Arg  
145 150 155 160

Met Asp Leu Glu Glu Pro Glu Lys Val Asp Lys Leu Gln Glu Pro Leu  
165 170 175

Leu Glu Ala Leu Arg Leu Tyr Ala Arg Arg Arg Pro Ser Gln Pro  
180 185 190

Tyr Met Phe Pro Arg Met Leu Met Lys Ile Thr Asp Leu Arg Gly Ile

195

200

205

Ser Thr Lys Gly Ala Glu Arg Ala Ile Thr Leu Lys Met Glu Ile Pro  
210 215 220

Gly Pro Met Pro Pro Leu Ile Arg Glu Met Leu Glu Asn Pro  
225 230 235

<210> 5  
<211> 251  
<212> PRT  
<213> Homo sapiens

<400> 5

Gln Leu Ile Pro Pro Leu Ile Asn Leu Leu Met Ser Ile Glu Pro Asp  
1 5 10 15

Val Ile Tyr Ala Gly His Asp Asn Thr Lys Pro Asp Thr Ser Ser Ser  
20 25 30

Leu Leu Thr Ser Leu Asn Gln Leu Gly Glu Arg Gln Leu Leu Ser Val  
35 40 45

Val Lys Trp Ser Lys Ser Leu Pro Gly Phe Arg Asn Leu His Ile Asp  
50 55 60

Asp Gln Ile Thr Leu Ile Gln Tyr Ser Trp Met Ser Leu Met Val Phe  
65 70 75 80

Gly Leu Gly Trp Arg Ser Tyr Lys His Val Ser Gly Gln Met Leu Tyr  
85 90 95

Phe Ala Pro Asp Leu Ile Leu Asn Glu Gln Arg Met Lys Glu Ser Ser  
100 105 110

Phe Tyr Ser Leu Cys Leu Thr Met Trp Gln Ile Pro Gln Glu Phe Val  
115 120 125

Lys Leu Gln Val Ser Gln Glu Glu Phe Leu Cys Met Lys Val Leu Leu  
130 135 140

Leu Leu Asn Thr Ile Pro Leu Glu Gly Leu Arg Ser Gln Thr Gln Phe  
145 150 155 160

Glu Glu Met Arg Ser Ser Tyr Ile Arg Glu Leu Ile Lys Ala Ile Gly  
165 170 175

Leu Arg Gln Lys Gly Val Val Ser Ser Gln Arg Phe Tyr Gln Leu  
180 185 190

Thr Lys Leu Leu Asp Asn Leu His Asp Leu Val Lys Gln Leu His Leu  
195 200 205

Tyr Cys Leu Asn Thr Phe Ile Gln Ser Arg Ala Leu Ser Val Glu Phe  
210 215 220

Pro Glu Met Met Ser Glu Val Ile Ala Ala Gln Leu Pro Lys Ile Leu  
225 230 235 240

Ala Gly Met Val Lys Pro Leu Leu Phe His Lys  
245 250

<210> 6  
<211> 250  
<212> PRT  
<213> Homo sapiens

<400> 6

Cys Gln Pro Ile Phe Leu Asn Val Leu Glu Ala Ile Glu Pro Gly Val  
1 5 10 15

Val Cys Ala Gly His Asp Asn Asn Gln Pro Asp Ser Phe Ala Ala Leu  
20 25 30

Leu Ser Ser Leu Asn Glu Leu Gly Glu Arg Gln Leu Val His Val Val  
35 40 45

Lys Trp Ala Lys Ala Leu Pro Gly Phe Arg Asn Leu His Val Asp Asp  
50 55 60

Gln Met Ala Val Ile Gln Tyr Ser Trp Met Gly Leu Met Val Phe Ala  
65 70 75 80

Met Gly Trp Arg Ser Phe Thr Asn Val Asn Ser Arg Met Leu Tyr Phe  
85 90 95

Ala Pro Asp Leu Val Phe Asn Glu Tyr Arg Met His Lys Ser Arg Met

100

105

110

Tyr Ser Gln Cys Val Arg Met Arg His Leu Ser Gln Glu Phe Gly Trp  
115 120 125

Leu Gln Ile Thr Pro Gln Glu Phe Leu Cys Met Lys Ala Leu Leu Leu  
130 135 140

Phe Ser Ile Ile Pro Val Asp Gly Leu Lys Asn Gln Lys Phe Phe Asp  
145 150 155 160

Glu Leu Arg Met Asn Tyr Ile Lys Glu Leu Asp Arg Ile Ile Ala Cys  
165 170 175

Lys Arg Lys Asn Pro Thr Ser Cys Ser Arg Arg Phe Tyr Gln Leu Thr  
180 185 190

Lys Leu Leu Asp Ser Val Gln Pro Ile Ala Arg Glu Leu His Gln Phe  
195 200 205

Thr Phe Asp Leu Leu Ile Lys Ser His Met Val Ser Val Asp Phe Pro  
210 215 220

Glu Met Met Ala Glu Ile Ile Ser Val Gln Val Pro Lys Ile Leu Ser  
225 230 235 240

Gly Lys Val Lys Pro Ile Tyr Phe His Thr  
245 250

<210> 7  
<211> 240  
<212> PRT  
<213> Homo sapiens

<400> 7

Ser Leu Ala Leu Ser Leu Thr Ala Asp Gln Met Val Ser Ala Leu Leu  
1 5 10 15

Asp Ala Glu Pro Pro Ile Leu Tyr Ser Glu Tyr Asp Pro Thr Arg Pro  
20 25 30

Phe Ser Glu Ala Ser Met Met Gly Leu Leu Thr Asn Leu Ala Asp Arg  
35 40 45

Glu Leu Val His Met Ile Asn Trp Ala Lys Arg Val Pro Gly Phe Val  
 50 55 60

Asp Leu Thr Leu His Asp Gln Val His Leu Leu Glu Cys Ala Trp Leu  
 65 70 75 80

Glu Ile Leu Met Ile Gly Leu Val Trp Arg Ser Met Glu His Pro Gly  
 85 90 95

Lys Leu Leu Phe Ala Pro Asn Leu Leu Asp Arg Asn Gln Gly Lys  
 100 105 110

Cys Val Glu Gly Met Val Glu Ile Phe Asp Met Leu Leu Ala Thr Ser  
 115 120 125

Ser Arg Phe Arg Met Met Asn Leu Gln Gly Glu Phe Val Cys Leu  
 130 135 140

Lys Ser Ile Ile Leu Leu Asn Ser Gly Val Tyr Thr Phe Leu Ser Ser  
 145 150 155 160

Thr Leu Lys Ser Leu Glu Glu Lys Asp His Ile His Arg Val Leu Asp  
 165 170 175

Lys Ile Thr Asp Thr Leu Ile His Leu Met Ala Lys Ala Gly Leu Thr  
 180 185 190

Leu Gln Gln Gln His Glu Arg Leu Ala Gln Leu Leu Leu Ile Leu Ser  
 195 200 205

His Ile Arg His Met Ser Asn Lys Gly Met Glu His Leu Tyr Ser Met  
 210 215 220

Lys Cys Lys Asn Val Val Pro Leu Tyr Asp Leu Leu Leu Glu Met Leu  
 225 230 235 240

<210> 8  
 <211> 232  
 <212> PRT  
 <213> Homo sapiens

<400> 8

Asp Ala Leu Ser Pro Glu Gln Leu Val Leu Thr Leu Leu Glu Ala Glu

1

5

10

15

Pro Pro His Val Leu Ile Ser Arg Thr Glu Ala Ser Met Met Met Ser  
20 25 30

Leu Thr Lys Leu Ala Asp Lys Glu Leu Val His Met Ile Ser Trp Ala  
35 40 45

Lys Lys Ile Pro Gly Phe Val Glu Leu Ser Leu Phe Asp Gln Val Arg  
50 55 60

Leu Leu Glu Ser Cys Trp Met Glu Val Leu Met Met Gly Leu Met Trp  
65 70 75 80

Arg Ser Ile Asp His Pro Gly Lys Leu Ile Phe Ala Pro Asp Leu Val  
85 90 95

Leu Asp Arg Asp Glu Gly Lys Cys Val Glu Gly Ile Leu Glu Ile Phe  
100 105 110

Asp Met Leu Leu Ala Thr Thr Ser Arg Phe Arg Glu Leu Lys Leu Gln  
115 120 125

His Lys Glu Tyr Leu Cys Val Lys Ala Met Ile Leu Leu Asn Ser Leu  
130 135 140

Val Thr Ala Thr Gln Asp Ala Asp Ser Ser Arg Lys Leu Ala His Leu  
145 150 155 160

Leu Asn Ala Val Thr Asp Ala Leu Val Trp Val Ile Ala Lys Ser Gly  
165 170 175

Ile Ser Ser Gln Gln Ser Met Arg Leu Ala Asn Leu Leu Met Leu  
180 185 190

Leu Ser His Val Arg His Ala Ser Asn Lys Gly Met Glu His Leu Leu  
195 200 205

Asn Met Lys Cys Lys Asn Val Val Pro Val Tyr Asp Leu Leu Leu Glu  
210 215 220

Met Leu Asn Ala His Val Leu Arg  
225 230

<210> 9  
<211> 250  
<212> PRT  
<213> Homo sapiens

<400> 9

Leu Arg Pro Lys Leu Ser Glu Glu Gln Gln Arg Ile Ile Ala Ile Leu  
1 5 10 15

Leu Asp Ala His His Lys Thr Tyr Asp Pro Thr Tyr Ser Asp Phe Cys  
20 25 30

Gln Phe Arg Pro Pro Val Arg Val Asn Asp Gly Gly Ser Val Thr  
35 40 45

Leu Glu Leu Ser Gln Leu Ser Met Leu Pro His Leu Ala Asp Leu Val  
50 55 60

Ser Tyr Ser Ile Gln Lys Val Ile Gly Phe Ala Lys Met Ile Pro Gly  
65 70 75 80

Phe Arg Asp Leu Thr Ser Glu Asp Gln Ile Val Leu Leu Lys Ser Ser  
85 90 95

Ala Ile Glu Val Ile Met Leu Arg Ser Asn Glu Ser Phe Thr Met Asp  
100 105 110

Asp Met Ser Trp Thr Cys Gly Asn Gln Asp Tyr Lys Tyr Arg Val Ser  
115 120 125

Asp Val Thr Lys Ala Gly His Ser Leu Glu Leu Ile Glu Pro Leu Ile  
130 135 140

Lys Phe Gln Val Gly Leu Lys Lys Leu Asn Leu His Glu Glu Glu His  
145 150 155 160

Val Leu Leu Met Ala Ile Cys Ile Val Ser Pro Asp Arg Pro Gly Val  
165 170 175

Gln Asp Ala Ala Leu Ile Glu Ala Ile Gln Asp Arg Leu Ser Asn Thr  
180 185 190

Leu Gln Thr Tyr Ile Arg Cys Arg His Pro Pro Pro Leu Leu Tyr Ala  
195 200 205

Lys Met Ile Gln Lys Leu Ala Asp Leu Arg Ser Leu Asn Glu Glu His  
210 215 220 225

Ser Lys Gln Tyr Arg Cys Leu Ser Phe Gln Pro Glu Cys Ser Met Lys  
225 230 235 240

Leu Thr Pro Leu Val Leu Glu Val Phe Gly  
245 250

<210> 10  
<211> 271  
<212> PRT  
<213> Homo sapiens

<400> 10

Glu Ser Ala Asp Leu Arg Ala Leu Ala Lys His Leu Tyr Asp Ser Tyr  
1 5 10 15

Ile Lys Ser Phe Pro Leu Thr Lys Ala Lys Ala Arg Ala Ile Leu Thr  
20 25 30

Gly Lys Thr Thr Asp Lys Ser Pro Phe Val Ile Tyr Asp Met Asn Ser  
35 40 45

Leu Met Met Gly Glu Asp Lys Ile Lys Phe Lys His Ile Thr Pro Leu  
50 55 60

Gln Glu Gln Ser Lys Glu Val Ala Ile Arg Ile Phe Gln Gly Cys Gln  
65 70 75 80

Phe Arg Ser Val Glu Ala Val Gln Glu Ile Thr Glu Tyr Ala Lys Ser  
85 90 95

Ile Pro Gly Phe Val Asn Leu Asp Leu Asn Asp Gln Val Thr Leu Leu  
100 105 110

Lys Tyr Gly Val His Glu Ile Ile Tyr Thr Met Leu Ala Ser Leu Met  
115 120 125

Asn Lys Asp Gly Val Leu Ile Ser Glu Gly Gln Gly Phe Met Thr Arg  
130 135 140

Glu Phe Leu Lys Ser Leu Arg Lys Pro Phe Gly Asp Phe Met Glu Pro  
145 150 155 160

Lys Phe Glu Phe Ala Val Lys Phe Asn Ala Leu Glu Leu Asp Asp Ser  
165 170 175

Asp Leu Ala Ile Phe Ile Ala Val Ile Ile Leu Ser Gly Asp Arg Pro  
180 185 190

Gly Leu Leu Asn Val Lys Pro Ile Glu Asp Ile Gln Asp Asn Leu Leu  
195 200 205

Gln Ala Leu Glu Leu Gln Leu Lys Leu Asn His Pro Glu Ser Ser Gln  
210 215 220

Leu Phe Ala Lys Leu Leu Gln Lys Met Thr Asp Leu Arg Gln Ile Val  
225 230 235 240

Thr Glu His Val Gln Leu Leu Gln Val Ile Lys Lys Thr Glu Thr Asp  
245 250 255

Met Ser Leu His Pro Leu Leu Gln Glu Ile Tyr Lys Asp Leu Tyr  
260 265 270

<210> 11  
<211> 254  
<212> PRT  
<213> Homo sapiens

<400> 11

Ser Arg Ala Leu Thr Pro Ser Pro Val Met Val Leu Glu Asn Ile Glu  
1 5 10 15

Pro Glu Ile Val Tyr Ala Gly Tyr Asp Ser Ser Lys Pro Asp Thr Ala  
20 25 30

Glu Asn Leu Leu Ser Thr Leu Asn Arg Leu Ala Gly Lys Gln Met Ile  
35 40 45

Gln Val Val Lys Trp Ala Lys Val Leu Pro Gly Phe Lys Asn Leu Pro  
50 55 60

Leu Glu Asp Gln Ile Thr Leu Ile Gln Tyr Ser Trp Met Cys Leu Ser  
65 70 75 80

Ser Phe Ala Leu Ser Trp Arg Ser Tyr Lys His Thr Asn Ser Gln Phe  
85 90 95

Leu Tyr Phe Ala Pro Asp Leu Val Phe Asn Glu Glu Lys Met His Gln  
100 105 110

Ser Ala Met Tyr Glu Leu Cys Gln Gly Met His Gln Ile Ser Leu Gln  
115 120 125

Phe Val Arg Leu Gln Leu Thr Phe Glu Glu Tyr Thr Ile Met Lys Val  
130 135 140

Leu Leu Leu Leu Ser Thr Ile Pro Lys Asp Gly Leu Lys Ser Gln Ala  
145 150 155 160

Ala Phe Glu Glu Met Arg Thr Asn Tyr Ile Lys Glu Leu Arg Lys Met  
165 170 175

Val Thr Lys Cys Pro Asn Asn Ser Gly Gln Ser Trp Gln Arg Phe Tyr  
180 185 190

Gln Leu Thr Lys Leu Leu Asp Ser Met His Asp Leu Val Ser Asp Leu  
195 200 205

Leu Glu Phe Cys Phe Tyr Thr Phe Arg Glu Ser His Ala Leu Lys Val  
210 215 220

Glu Phe Pro Ala Met Leu Val Glu Ile Ile Ser Asp Gln Leu Pro Lys  
225 230 235 240

Val Glu Ser Gly Asn Ala Lys Pro Leu Tyr Phe His Arg Lys  
245 250

<210> 12  
<211> 242  
<212> PRT  
<213> Homo sapiens

<400> 12

Lys Pro Glu Pro Thr Asp Glu Glu Trp Glu Leu Ile Lys Thr Val Thr  
1 5 10 15

Glu Ala His Val Ala Thr Asn Ala Gln Gly Ser His Trp Lys Gln Lys  
20 25 30

Arg Lys Phe Leu Pro Glu Asp Ile Gly Gln Ala Pro Lys Val Asp Leu  
35 40 45

Glu Ala Phe Ser His Phe Thr Lys Ile Ile Thr Pro Ala Ile Thr Arg  
50 55 60

Val Val Asp Phe Ala Lys Lys Leu Pro Met Phe Cys Glu Leu Pro Cys  
65 70 75 80

Glu Asp Gln Ile Ile Leu Leu Lys Gly Cys Cys Met Glu Ile Met Ser  
85 90 95

Leu Arg Ala Ala Val Arg Tyr Asp Pro Glu Ser Glu Thr Leu Thr Leu  
100 105 110

Asn Gly Glu Met Ala Val Thr Arg Gly Gln Leu Lys Asn Gly Gly Leu  
115 120 125

Gly Val Val Ser Asp Ala Ile Phe Asp Leu Gly Met Ser Leu Ser Ser  
130 135 140

Phe Asn Leu Asp Asp Thr Glu Val Ala Leu Leu Gln Ala Val Leu Leu  
145 150 155 160

Met Ser Ser Asp Arg Pro Gly Leu Ala Cys Val Glu Arg Ile Glu Lys  
165 170 175

Tyr Gln Asp Ser Phe Leu Leu Ala Phe Glu His Tyr Ile Asn Tyr Arg  
180 185 190

Lys His His Val Thr His Phe Trp Pro Lys Leu Leu Met Lys Val Thr  
195 200 205

Asp Leu Arg Met Ile Gly Ala Cys His Ala Ser Arg Phe Leu His Met  
210 215 220

Lys Val Glu Cys Pro Thr Glu Leu Phe Pro Pro Leu Phe Leu Glu Val  
225 230 235 240

Phe Glu

<210> 13  
<211> 255  
<212> PRT  
<213> Homo sapiens

<400> 13

Ala Thr Leu Pro Gln Leu Thr Pro Thr Leu Val Ser Leu Leu Glu Val  
1 5 10 15

Ile Glu Pro Glu Val Leu Tyr Ala Gly Tyr Asp Ser Ser Val Pro Asp  
20 25 30

Ser Thr Trp Arg Ile Met Thr Thr Leu Asn Met Leu Gly Gly Arg Gln  
35 40 45

Val Ile Ala Ala Val Lys Trp Ala Lys Ala Ile Pro Gly Phe Arg Asn  
50 55 60

Leu His Leu Asp Asp Gln Met Thr Leu Leu Gln Tyr Ser Trp Met Phe  
65 70 75 80

Leu Met Ala Phe Ala Leu Gly Trp Arg Ser Tyr Arg Gln Ser Ser Ala  
85 90 95

Asn Leu Leu Cys Phe Ala Pro Asp Leu Ile Ile Asn Glu Gln Arg Met  
100 105 110

Thr Leu Pro Cys Met Tyr Asp Gln Cys Lys His Met Leu Tyr Val Ser  
115 120 125

Ser Glu Leu His Arg Leu Gln Val Ser Tyr Glu Glu Tyr Leu Cys Met  
130 135 140

Lys Thr Leu Leu Leu Leu Ser Ser Val Pro Lys Asp Gly Leu Lys Ser  
145 150 155 160

Gln Glu Leu Phe Asp Glu Ile Arg Met Thr Tyr Ile Lys Glu Leu Gly  
165 170 175

Lys Ala Ile Val Lys Arg Glu Gly Asn Ser Ser Gln Asn Trp Gln Arg

180

185

190

Phe Tyr Gln Leu Thr Lys Leu Leu Asp Ser Met His Glu Val Val Glu  
195 200 205

Asn Leu Leu Asn Tyr Cys Phe Gln Thr Phe Leu Asp Lys Thr Met Ser  
210 215 220

Ile Glu Phe Pro Glu Met Leu Ala Glu Ile Ile Thr Asn Gln Ile Pro  
225 230 235 240

Lys Tyr Ser Asn Gly Asn Ile Lys Lys Leu Leu Phe His Gln Lys  
245 250 255

<210> 14

<211> 777

<212> PRT

<213> Saimiri boliviensis

<400> 14

Met Asp Ser Lys Glu Ser Leu Thr Pro Gly Lys Glu Glu Asn Pro Ser  
1 5 10 15

Ser Val Leu Thr Gln Glu Arg Gly Asn Val Met Asp Phe Cys Lys Ile  
20 25 30

Leu Arg Gly Gly Ala Thr Leu Lys Val Ser Val Ser Ser Thr Ser Leu  
35 40 45

Ala Ala Ala Ser Gln Ser Asp Ser Lys Gln Gln Arg Leu Leu Val Asp  
50 55 60

Phe Pro Lys Gly Ser Val Ser Asn Ala Gln Gln Pro Asp Leu Ser Lys  
65 70 75 80

Ala Val Ser Leu Ser Met Gly Leu Tyr Met Gly Glu Thr Glu Thr Lys  
85 90 95

Val Met Gly Asn Asp Leu Gly Phe Pro Gln Gln Gly Gln Ile Ser Leu  
100 105 110

Ser Ser Gly Glu Thr Asp Leu Gln Leu Leu Glu Glu Ser Ile Ala Asn  
115 120 125

Leu Asn Arg Ser Thr Ser Val Pro Glu Asn Pro Lys Ser Ser Ala Ser  
130 135 140

Ser Ser Val Ser Ala Ala Pro Lys Glu Lys Glu Phe Pro Lys Thr His  
145 150 155 160

Ser Asp Val Ser Ser Glu Gln Gln Asn Leu Lys Gly Gln Thr Gly Ser  
165 170 175

Asn Gly Gly Asn Val Lys Leu Tyr Thr Ala Asp Gln Ser Thr Phe Asp  
180 185 190

Ile Leu Gln Asp Leu Glu Phe Ser Ser Gly Ser Pro Gly Lys Glu Thr  
195 200 205

Asn Gln Ser Pro Trp Lys Ser Asp Leu Leu Ile Asp Glu Asn Cys Leu  
210 215 220

Leu Ser Pro Leu Ala Gly Glu Glu Asp Ser Phe Leu Leu Glu Gly Asn  
225 230 235 240

Ser Asn Glu Asp Cys Lys Pro Leu Ile Leu Pro Asp Thr Lys Pro Lys  
245 250 255

Ile Lys Asp Asn Gly Asp Leu Val Leu Ser Ser Ser Ser Asn Val Thr  
260 265 270

Leu Pro Gln Val Lys Thr Glu Lys Glu Asp Phe Ile Glu Leu Cys Thr  
275 280 285

Pro Gly Val Ile Lys Gln Glu Lys Leu Ser Thr Val Tyr Cys Gln Ala  
290 295 300

Ser Phe Pro Gly Ala Asn Ile Ile Gly Asn Lys Met Ser Ala Ile Ser  
305 310 315 320

Ile His Gly Val Ser Thr Ser Gly Gly Gln Met Tyr His Tyr Asp Met  
325 330 335

Asn Thr Ala Ser Leu Ser Gln Gln Asp Gln Lys Pro Ile Phe Asn  
340 345 350

Val Ile Pro Pro Ile Pro Val Gly Ser Glu Asn Trp Asn Arg Cys Gln  
355 360 365

Gly Ser Gly Asp Asp Asn Leu Thr Ser Leu Gly Thr Leu Asn Phe Pro  
370 375 380

Gly Arg Thr Val Phe Ser Asn Gly Tyr Ser Ser Pro Ser Met Arg Pro  
385 390 395 400

Asp Val Ser Ser Pro Pro Ser Ser Ser Thr Ala Thr Thr Gly Pro  
405 410 415

Pro Pro Lys Leu Cys Leu Val Cys Ser Asp Glu Ala Ser Gly Cys His  
420 425 430

Tyr Gly Val Leu Thr Cys Gly Ser Cys Lys Val Phe Phe Lys Arg Ala  
435 440 445

Val Glu Gly Gln His Asn Tyr Leu Cys Ala Gly Arg Asn Asp Cys Ile  
450 455 460

Ile Asp Lys Ile Arg Arg Lys Asn Cys Pro Ala Cys Arg Tyr Arg Lys  
465 470 475 480

Cys Leu Gln Ala Gly Met Asn Leu Glu Ala Arg Lys Thr Lys Lys Lys  
485 490 495

Ile Lys Gly Ile Gln Gln Ala Thr Thr Gly Val Ser Gln Glu Thr Ser  
500 505 510

Glu Asn Pro Ala Asn Lys Thr Ile Val Pro Ala Thr Leu Pro Gln Leu  
515 520 525

Thr Pro Thr Leu Val Ser Leu Leu Glu Val Ile Glu Pro Glu Val Leu  
530 535 540

Tyr Ala Gly Tyr Asp Ser Thr Val Pro Asp Ser Thr Trp Arg Ile Met  
545 550 555 560

Thr Thr Leu Asn Met Leu Gly Gly Arg Gln Val Ile Ala Ala Val Lys  
565 570 575

Trp Ala Lys Ala Ile Pro Gly Phe Arg Asn Leu His Leu Asp Asp Gln

580

585

590

Met Thr Leu Leu Gln Tyr Ser Trp Met Phe Leu Met Ala Phe Ala Leu  
595 600 605

Gly Trp Arg Ser Tyr Arg Gln Ala Ser Ser Asn Leu Leu Cys Phe Ala  
610 615 620

Pro Asp Leu Ile Ile Asn Glu Gln Arg Met Thr Leu Pro Cys Met Tyr  
625 630 635 640

Asp Gln Cys Lys His Met Leu Tyr Val Ser Ser Glu Leu His Arg Leu  
645 650 655

Gln Val Ser Tyr Glu Glu Tyr Leu Cys Met Lys Thr Leu Leu Leu  
660 665 670

Ser Ser Val Pro Lys Asp Gly Leu Lys Ser Gln Glu Leu Phe Asp Glu  
675 680 685

Ile Arg Met Thr Tyr Ile Lys Glu Leu Gly Lys Ala Ile Val Lys Arg  
690 695 700

Glu Gly Asn Ser Ser Gln Asn Trp Gln Arg Phe Tyr Gln Leu Thr Lys  
705 710 715 720

Leu Leu Asp Ser Met His Glu Val Val Glu Asn Leu Leu Asn Tyr Cys  
725 730 735

Phe Gln Thr Phe Leu Asp Lys Thr Met Ser Ile Glu Phe Pro Glu Met  
740 745 750

Leu Ala Glu Ile Ile Thr Asn Gln Leu Pro Lys Tyr Ser Asn Gly Asn  
755 760 765

Ile Lys Lys Leu Leu Phe His Gln Lys  
770 775

<210> 15  
<211> 703  
<212> PRT  
<213> Sus scrofa

<400> 15

Val Ser Ala Ser Ser Pro Ser Leu Ala Ala Val Ser Gln Pro Asp Ser  
1 5 10 15

Lys Gln Gln Arg Leu Ala Val Asp Phe Pro Lys Gly Ser Gly Ser Asn  
20 25 30

Ala Gln Gln Pro Asp Leu Ser Lys Ala Val Ser Leu Ser Met Gly Leu  
35 40 45

Tyr Met Gly Glu Thr Glu Thr Lys Val Met Gly Ser Asp Leu Gly Phe  
50 55 60

Pro Gln Gln Gly Gln Ile Ser Leu Ser Ser Gly Glu Thr Asp Phe Arg  
65 70 75 80

Leu Leu Glu Glu Ser Ile Ala Asn Leu Ser Arg Ser Thr Ser Val Pro  
85 90 95

Glu Asn Pro Lys Ser Ser Ala Ser Ala Ala Gly Pro Ala Ala Pro Ala  
100 105 110

Glu Lys Ala Phe Pro Lys Thr His Ser Asp Gly Ala Pro Glu Gln Pro  
115 120 125

Asn Val Lys Gly Gln Thr Gly Thr Asn Gly Gly Asn Val Lys Leu Phe  
130 135 140

Thr Thr Asp Gln Ser Thr Phe Asp Ile Trp Arg Lys Lys Leu Gln Asp  
145 150 155 160

Leu Glu Leu Pro Ser Gly Ser Pro Gly Lys Glu Thr Ser Glu Ser Pro  
165 170 175

Trp Ser Ser Asp Leu Leu Ile Asp Glu Asn Cys Leu Leu Ser Pro Leu  
180 185 190

Ala Gly Glu Glu Asp Pro Phe Leu Leu Glu Gly Ser Ser Thr Glu Asp  
195 200 205

Cys Lys Pro Leu Val Leu Pro Asp Thr Lys Pro Lys Val Lys Asp Asn  
210 215 220

Gly Glu Leu Ile Leu Pro Ser Pro Asn Ser Val Pro Leu Pro Gln Val  
225 230 235 240

Lys Thr Glu Lys Glu Asp Phe Ile Glu Leu Cys Thr Pro Gly Val Ile  
245 250 255

Lys Gln Glu Lys Leu Gly Pro Ala Tyr Cys Gln Ala Ser Phe Ser Gly  
260 265 270

Ala Asn Ile Ile Gly Gly Lys Met Ser Ala Ile Ser Val His Gly Val  
275 280 285

Ser Thr Ser Gly Gly Gln Leu Tyr His Tyr Asp Met Asn Thr Ala Ala  
290 295 300

Ser Leu Ser Lys Gln Gln Glu Gln Lys Pro Leu Phe Asn Val Ile Pro  
305 310 315 320

Pro Ile Pro Val Gly Ser Glu Asn Trp Asn Arg Cys Gln Gly Ser Gly  
325 330 335

Asp Asp Asn Leu Thr Ser Leu Gly Thr Leu Asn Phe Ser Gly Arg Ser  
340 345 350

Val Phe Ser Asn Gly Tyr Ser Ser Pro Gly Met Arg Pro Asp Val Ser  
355 360 365

Ser Pro Pro Ser Ser Ser Ala Ala Thr Gly Pro Pro Pro Lys Leu  
370 375 380

Cys Leu Val Cys Ser Asp Glu Ala Ser Gly Cys His Tyr Gly Val Leu  
385 390 395 400

Thr Cys Gly Ser Cys Lys Val Phe Phe Lys Arg Ala Val Glu Gly Gln  
405 410 415

His Asn Tyr Leu Cys Ala Gly Arg Asn Asp Cys Ile Ile Asp Lys Ile  
420 425 430

Arg Arg Lys Asn Cys Pro Ala Cys Arg Tyr Arg Lys Cys Leu Gln Ala  
435 440 445

Gly Met Asn Leu Glu Ala Arg Lys Thr Lys Lys Ile Lys Gly Ile

450                    455                    460

Gln Gln Ala Thr Thr Gly Val Ser Gln Glu Thr Ser Glu Asn Ser Ala  
465                    470                    475                    480

Asn Lys Thr Ile Val Pro Ala Thr Leu Pro Gln Leu Thr Pro Thr Leu  
485                    490                    495

Val Ser Leu Leu Glu Val Ile Glu Pro Glu Val Leu Tyr Ala Gly Tyr  
500                    505                    510

Asp Ser Ser Ile Pro Asp Ser Thr Trp Arg Ile Met Thr Ala Leu Asn  
515                    520                    525

Met Leu Gly Gly Arg Gln Val Ile Ala Ala Val Lys Trp Ala Lys Ala  
530                    535                    540

Ile Pro Gly Phe Arg Asn Leu His Leu Asp Asp Gln Met Thr Leu Leu  
545                    550                    560

Gln Tyr Ser Trp Met Phe Leu Met Val Phe Ala Leu Gly Trp Arg Ser  
565                    570                    575

Tyr Arg Gln Ser Ser Ala Ser Leu Leu Cys Phe Ala Pro Asp Leu Val  
580                    585                    590

Ile Asn Glu Gln Arg Met Ala Leu Pro Cys Met Tyr Asp Gln Cys Arg  
595                    600                    605

His Met Leu Tyr Val Ser Ser Glu Leu Gln Arg Leu Gln Val Ser Tyr  
610                    615                    620

Glu Glu Tyr Leu Cys Met Lys Thr Leu Leu Leu Ser Ser Val Pro  
625                    630                    635                    640

Lys Asp Gly Leu Lys Ser Gln Glu Leu Phe Asp Glu Ile Arg Met Thr  
645                    650                    655

Tyr Ile Lys Glu Leu Gly Lys Ala Ile Val Lys Arg Glu Gly Asn Ser  
660                    665                    670

Ser Gln Asn Trp Gln Arg Phe Tyr Gln Leu Thr Lys Leu Leu Asp Ser  
675                    680                    685

Met His Asp Val Val Glu Asn Leu Leu Asn Tyr Cys Phe Gln Thr  
690 695 700

<210> 16  
<211> 771  
<212> PRT  
<213> Cavia porcellus

<400> 16

Met Asp Leu Lys Glu Ser Val Thr Ser Ser Lys Glu Val Pro Ser Ser  
1 5 10 15

Val Leu Gly Ser Glu Arg Arg Asn Val Ile Asp Phe Tyr Lys Thr Val  
20 25 30

Arg Gly Gly Ala Thr Val Lys Val Ser Ala Ser Ser Pro Ser Leu Ala  
35 40 45

Ala Ala Ala Gln Ser Asp Ser Lys Gln Arg Arg Leu Leu Val Asp Phe  
50 55 60

Pro Lys Gly Ser Gly Ser Asn Ala Gln Gln Pro Asp Leu Ser Lys Ala  
65 70 75 80

Val Ser Leu Ser Met Gly Leu Tyr Met Gly Glu Thr Glu Thr Lys Val  
85 90 95

Met Gly Asn Asp Leu Gly Phe Pro Gln Gln Gly Gln Ile Ser Leu Pro  
100 105 110

Ser Gly Glu Thr Asp Phe Arg Leu Leu Glu Glu Ser Ile Ala Asn Leu  
115 120 125

Ser Arg Ser Thr Ser Val Pro Glu Asn Pro Lys Asn Ser Ala Ser Ala  
130 135 140

Val Ser Gly Thr Pro Thr Glu Glu Phe Pro Lys Thr Gln Ser Asp Leu  
145 150 155 160

Ser Ser Glu Gln Glu Asn Leu Lys Ser Gln Ala Gly Thr Asn Gly Gly  
165 170 175

Asn Val Lys Phe Pro Pro Asp Gln Ser Thr Phe Asp Ile Leu Lys Asp  
180 185 190

Leu Glu Phe Ser Ser Gly Ser Pro Gly Lys Glu Arg Ser Glu Ser Pro  
195 200 205

Trp Arg Pro Asp Leu Leu Met Asp Glu Ser Cys Leu Leu Ser Pro Leu  
210 215 220

Ala Gly Glu Asp Asp Pro Phe Leu Leu Glu Gly Asn Ser Asn Glu Asp  
225 230 235 240

Cys Lys Pro Leu Ile Leu Pro Asp Thr Lys Pro Lys Ile Lys Asp Asn  
245 250 255

Gly Asp Gly Ile Leu Ser Ser Asn Ser Val Pro Gln Pro Gln Val  
260 265 270

Lys Ile Gly Lys Glu Asp Phe Ile Glu Leu Cys Thr Pro Gly Val Ile  
275 280 285

Lys Gln Glu Lys Leu Gly Pro Val Tyr Cys Gln Ala Ser Phe Ser Gly  
290 295 300

Ala Asn Ile Ile Gly Asn Lys Met Ser Ala Ile Ser Val His Gly Val  
305 310 315 320

Ser Thr Ser Gly Gly Gln Met Tyr His Tyr Asp Met Asn Thr Ala Ser  
325 330 335

Leu Ser Gln Gln Gln Asp Gln Lys Pro Ile Phe Asn Val Ile Pro Pro  
340 345 350

Ile Pro Val Gly Ser Glu Asn Trp Asn Arg Cys Gln Gly Ser Gly Glu  
355 360 365

Asp Asn Leu Thr Ser Leu Gly Thr Val Asn Phe Pro Gly Arg Ser Val  
370 375 380

Phe Ser Asn Gly Tyr Ser Ser Pro Gly Leu Arg Pro Asp Val Ser Ser  
385 390 395 400

Pro Pro Ser Ser Ser Thr Thr Gly Pro Pro Pro Lys Leu Cys

405                    410                    415

Leu Val Cys Ser Asp Glu Leu Ser Gly Cys His Tyr Gly Val Leu Thr  
420                    425                    430

Cys Gly Ser Cys Lys Val Phe Phe Lys Arg Ala Val Glu Gly Gln His  
435                    440                    445

Asn Tyr Leu Cys Ala Gly Arg Asn Asp Cys Ile Ile Asp Lys Ile Arg  
450                    455                    460

Arg Glu Asn Cys Pro Ala Cys Arg Tyr Arg Lys Cys Leu Gln Ala Gly  
465                    470                    475                    480

Met Asn Leu Gln Ala Arg Lys Thr Lys Lys Ile Lys Gly Ile Gln  
485                    490                    495

Gln Ala Thr Thr Gly Val Ser Gln Asn Thr Ser Glu Asn Pro Asn Lys  
500                    505                    510

Thr Ile Val Pro Ala Thr Leu Pro Gln Leu Thr Pro Thr Leu Val Ser  
515                    520                    525

Leu Leu Glu Val Ile Glu Pro Glu Val Ile His Ser Gly Tyr Asp Ser  
530                    535                    540

Thr Ser Pro Asp Ser Thr Trp Arg Ile Met Thr Thr Leu Asn Met Leu  
545                    550                    555                    560

Gly Gly Arg Gln Val Ile Ala Ala Val Lys Trp Ala Lys Ala Ile Pro  
565                    570                    575

Gly Phe Lys Asn Leu His Leu Asp Asp Gln Met Thr Leu Leu Gln Tyr  
580                    585                    590

Ser Trp Met Phe Leu Met Ala Phe Ala Leu Gly Trp Arg Ser Tyr Lys  
595                    600                    605

Gln Ser Asn Gly Ser Leu Leu Cys Phe Ala Pro Asp Leu Ile Ile Asn  
610                    615                    620

Glu Gln Arg Met Ser Leu Pro Trp Met Tyr Asp Gln Cys Arg Tyr Met  
625                    630                    635                    640

Leu Tyr Val Ser Ser Glu Leu Lys Arg Leu Gln Val Ser Tyr Glu Glu  
645 650 655

Tyr Leu Cys Met Lys Thr Leu Leu Leu Ser Ser Val Pro Lys Glu  
660 665 670

Gly Leu Lys Ser Gln Glu Leu Phe Asp Glu Ile Arg Met Thr Tyr Ile  
675 680 685

Lys Glu Leu Gly Lys Ala Ile Val Lys Arg Glu Gly Asn Ser Ser Gln  
690 695 700

Asn Trp Gln Arg Phe Tyr Gln Leu Thr Lys Leu Leu Asp Ser Leu His  
705 710 715 720

Glu Ile Val Gly Asn Leu Leu Asn Ile Cys Phe Lys Thr Phe Leu Asp  
725 730 735

Lys Thr Met Asn Ile Glu Phe Pro Glu Met Leu Ala Glu Ile Ile Thr  
740 745 750

Asn Gln Leu Pro Lys Tyr Ser Asn Gly Asp Ile Lys Lys Leu Leu Phe  
755 760 765

His Gln Lys  
770

<210> 17  
<211> 777  
<212> PRT  
<213> Saguinus oedipus

<400> 17

Met Asp Ser Lys Glu Ser Leu Thr Pro Gly Lys Glu Glu Asn Pro Ser  
1 5 10 15

Ser Val Leu Thr Gln Glu Arg Gly Asn Val Met Asp Phe Cys Lys Ile  
20 25 30

Leu Arg Gly Gly Ala Thr Leu Lys Val Ser Val Ser Ser Thr Ser Leu  
35 40 45

Ala Ala Ala Ser Gln Ser Asp Ser Lys Gln Gln Arg Leu Leu Val Asp  
50 55 60

Phe Pro Lys Gly Ser Val Ser Asn Ala Gln Gln Pro Asp Leu Ser Lys  
65 70 75 80

Ala Val Ser Leu Ser Met Gly Leu Tyr Met Gly Glu Thr Glu Thr Lys  
85 90 95

Val Met Gly Asn Asp Leu Gly Phe Pro Gln Gln Gly Gln Ile Ser Leu  
100 105 110

Ser Ser Gly Glu Thr Asp Leu Gln Leu Leu Glu Glu Ser Ile Ala Asn  
115 120 125

Leu Asn Arg Ser Thr Ser Val Pro Glu Asn Pro Lys Ser Ser Ala Ser  
130 135 140

Ser Ser Val Ser Ala Ala Pro Lys Glu Lys Glu Phe Pro Lys Thr His  
145 150 155 160

Ser Asp Val Ser Ser Glu Gln Gln Asn Leu Lys Gly Gln Thr Gly Thr  
165 170 175

Asn Gly Gly Asn Ala Lys Leu Cys Thr Ala Asp Gln Ser Thr Phe Asp  
180 185 190

Ile Leu Gln Asp Leu Glu Phe Ser Ser Gly Ser Pro Gly Lys Glu Thr  
195 200 205

Asn Gln Ser Pro Trp Arg Ser Asp Leu Leu Ile Asp Glu Asn Cys Leu  
210 215 220

Leu Ser Pro Leu Ala Gly Glu Glu Asp Ser Phe Leu Leu Glu Gly Asn  
225 230 235 240

Ser Asn Glu Asp Cys Lys Pro Leu Ile Leu Pro Asp Thr Lys Pro Lys  
245 250 255

Ile Lys Asp Asn Gly Asp Leu Val Leu Ser Ser Ser Asn Val Thr  
260 265 270

Leu Pro Gln Val Lys Thr Glu Lys Glu Asp Phe Ile Glu Leu Cys Thr

275

280

285

Pro Gly Val Ile Lys Gln Glu Lys Leu Ser Thr Val Tyr Cys Gln Ala  
290 295 300

Ser Phe Pro Gly Ala Asn Ile Ile Gly Asn Lys Met Ser Ala Ile Ser  
305 310 315 320

Ile His Gly Val Ser Thr Ser Gly Gly Gln Met Tyr His Tyr Asp Met  
325 330 335

Asn Thr Ala Ser Leu Ser Gln Gln Asp Gln Lys Pro Ile Phe Asn  
340 345 350

Val Ile Pro Pro Ile Pro Val Gly Ser Glu Asn Trp Asn Arg Cys Gln  
355 360 365

Gly Ser Gly Asp Asp Asn Leu Thr Ser Leu Gly Thr Leu Asn Phe Pro  
370 375 380

Gly Arg Thr Val Phe Ser Asn Gly Tyr Ser Ser Pro Ser Met Arg Pro  
385 390 395 400

Asp Val Ser Ser Pro Pro Ser Ser Ser Thr Ala Thr Thr Gly Pro  
405 410 415

Pro Pro Lys Leu Cys Leu Val Cys Ser Asp Glu Ala Ser Gly Cys His  
420 425 430

Tyr Gly Val Leu Thr Cys Gly Ser Cys Lys Val Phe Phe Lys Arg Ala  
435 440 445

Val Glu Gly Gln His Asn Tyr Leu Cys Ala Gly Arg Asn Asp Cys Ile  
450 455 460

Ile Asp Lys Ile Arg Arg Lys Asn Cys Pro Ala Cys Arg Tyr Arg Lys  
465 470 475 480

Cys Leu Gln Ala Gly Met Asn Leu Glu Ala Arg Lys Thr Lys Lys Lys  
485 490 495

Ile Lys Gly Ile Gln Gln Ala Thr Thr Gly Val Ser Gln Glu Thr Ser  
500 505 510

Glu Asn Pro Ala Asn Lys Thr Ile Val Pro Ala Thr Leu Pro Gln Leu  
515 520 525

Thr Pro Thr Leu Val Ser Leu Leu Glu Val Ile Glu Pro Glu Val Leu  
530 535 540

Tyr Ala Gly Tyr Asp Ser Thr Val Pro Asp Ser Thr Trp Arg Ile Met  
545 550 555 560

Thr Thr Leu Asn Met Leu Gly Gly Arg Gln Val Ile Ala Ala Val Lys  
565 570 575

Trp Ala Lys Ala Ile Pro Gly Phe Arg Asn Leu His Leu Asp Asp Gln  
580 585 590

Met Thr Leu Leu Gln Tyr Ser Trp Met Phe Leu Met Ala Phe Ala Leu  
595 600 605

Gly Trp Arg Ser Tyr Arg Gln Ala Ser Ser Asn Leu Leu Cys Phe Ala  
610 615 620

Pro Asp Leu Ile Ile Asn Glu Gln Arg Met Thr Leu Pro Cys Met Tyr  
625 630 635 640

Asp Gln Cys Lys His Met Leu Tyr Val Ser Ser Glu Leu His Arg Leu  
645 650 655

Gln Val Ser Tyr Glu Glu Tyr Leu Cys Met Lys Thr Leu Leu Leu  
660 665 670

Ser Ser Val Pro Lys Asp Gly Leu Lys Ser Gln Glu Leu Phe Asp Glu  
675 680 685

Ile Arg Met Thr Tyr Ile Lys Glu Leu Gly Lys Ala Ile Val Lys Arg  
690 695 700

Glu Gly Asn Ser Ser Gln Asn Trp Gln Arg Phe Tyr Gln Leu Thr Lys  
705 710 715 720

Leu Leu Asp Ser Met His Glu Val Val Glu Asn Leu Leu Asn Tyr Cys  
725 730 735

Phe Gln Thr Phe Leu Asp Lys Thr Met Ser Ile Glu Phe Pro Glu Met  
740 745 750

Leu Ala Glu Ile Ile Thr Asn Gln Leu Pro Lys Tyr Ser Asn Gly Asn  
755 760 765

Ile Arg Lys Leu Leu Phe His Gln Lys  
770 775

<210> 18  
<211> 777  
<212> PRT  
<213> Aotus nancymaae

<400> 18

Met Asp Ser Lys Glu Ser Leu Thr Pro Gly Lys Glu Glu Asn Pro Ser  
1 5 10 15

Ser Val Leu Thr Gln Glu Arg Gly Asn Val Met Asp Phe Ser Lys Ile  
20 25 30

Leu Arg Gly Gly Ala Thr Leu Lys Val Ser Val Ser Ser Thr Ser Leu  
35 40 45

Ala Ala Ala Ser Gln Ser Asp Ser Lys Gln Gln Arg Leu Leu Val Asp  
50 55 60

Phe Pro Lys Gly Ser Val Ser Asn Ala Gln Gln Pro Asp Leu Ser Lys  
65 70 75 80

Ala Val Ser Leu Ser Met Gly Leu Tyr Met Gly Glu Thr Glu Thr Lys  
85 90 95

Val Met Gly Asn Asp Leu Gly Phe Pro Gln Gln Gly Gln Ile Ser Leu  
100 105 110

Ser Ser Gly Glu Thr Asp Leu Gln Leu Leu Glu Glu Ser Ile Ala Asn  
115 120 125

Leu Asn Arg Ser Thr Ser Val Pro Glu Asn Pro Lys Ser Ser Ala Ser  
130 135 140

Ser Ser Val Ser Ala Ala Pro Lys Glu Lys Glu Phe Pro Lys Thr His

145                    150                    155                    160

Ser Asp Val Ser Ser Glu Gln Gln Asn Leu Lys Gly Gln Thr Gly Thr  
165    170                            175

Asn Gly Gly Asn Val Lys Leu Tyr Thr Ala Asp Gln Ser Thr Phe Asp  
180    185                            190

Ile Leu Gln Asp Leu Glu Phe Ser Ser Gly Ser Pro Gly Lys Glu Thr  
195    200                            205

Asn Gln Ser Pro Trp Arg Ser Asp Leu Leu Ile Asp Glu Asn Cys Leu  
210    215                            220

Leu Ser Pro Leu Ala Gly Glu Glu Asp Ser Phe Leu Leu Glu Gly Asn  
225    230                            235                            240

Ser Asn Glu Asp Cys Lys Pro Leu Ile Leu Pro Asp Thr Lys Pro Lys  
245    250                            255

Ile Lys Asp Asn Gly Asp Leu Val Leu Ser Ser Ser Asn Val Thr  
260    265                            270

Leu Pro Gln Val Lys Thr Glu Lys Glu Asp Phe Ile Glu Leu Cys Thr  
275    280                            285

Pro Gly Val Ile Lys Gln Glu Lys Leu Ser Thr Val Tyr Cys Gln Ala  
290    295                            300

Ser Phe Pro Gly Ala Asn Val Ile Gly Asn Lys Met Ser Ala Ile Ser  
305    310                            315                            320

Ile His Gly Val Ser Thr Ser Gly Gly Gln Met Tyr His Tyr Asp Met  
325    330                            335

Asn Thr Ala Ser Leu Ser Gln Gln Asp Gln Lys Pro Ile Phe Asn  
340    345                            350

Val Ile Pro Pro Ile Pro Val Gly Ser Glu Asn Trp Asn Arg Cys Gln  
355    360                            365

Gly Ser Gly Asp Asp Asn Leu Thr Ser Leu Gly Thr Leu Asn Phe Pro  
370    375                            380

Gly Arg Thr Val Phe Ser Asn Gly Tyr Ser Ser Pro Ser Met Arg Pro  
385 390 395 400

Asp Val Ser Ser Pro Pro Ser Ser Ser Thr Ala Thr Thr Gly Pro  
405 410 415

Pro Pro Lys Leu Cys Leu Val Cys Ser Asp Glu Ala Ser Gly Cys His  
420 425 430

Tyr Gly Val Leu Thr Cys Gly Ser Cys Lys Val Phe Phe Lys Arg Ala  
435 440 445

Val Glu Gly Gln His Asn Tyr Leu Cys Ala Gly Arg Asn Asp Cys Ile  
450 455 460

Ile Asp Lys Ile Arg Arg Lys Asn Cys Pro Ala Cys Arg Tyr Arg Lys  
465 470 475 480

Cys Leu Gln Ala Gly Met Asn Leu Glu Ala Arg Lys Thr Lys Lys  
485 490 495

Ile Lys Gly Ile Gln Gln Ala Thr Thr Gly Val Ser Gln Glu Thr Ser  
500 505 510

Glu Asn Pro Ala Asn Lys Thr Ile Val Pro Ala Thr Leu Pro Gln Leu  
515 520 525

Thr Pro Thr Leu Val Ser Leu Leu Glu Val Ile Glu Pro Glu Val Leu  
530 535 540

Tyr Ala Gly Tyr Asp Ser Thr Val Pro Asp Ser Thr Trp Arg Ile Met  
545 550 555 560

Thr Thr Leu Asn Met Leu Gly Gly Arg Gln Val Ile Ala Ala Val Lys  
565 570 575

Trp Ala Lys Ala Ile Pro Gly Phe Arg Asn Leu His Leu Asp Asp Gln  
580 585 590

Met Thr Leu Leu Gln Tyr Ser Trp Met Phe Leu Met Ala Phe Ala Leu  
595 600 605

Gly Trp Arg Ser Tyr Arg Gln Ala Ser Ser Asn Leu Leu Cys Phe Ala  
610 615 620

Pro Asp Leu Ile Ile Asn Glu Gln Arg Met Thr Leu Pro Cys Met Tyr  
625 630 635 640

Asp Gln Cys Lys His Met Leu Tyr Val Ser Ser Glu Leu His Arg Leu  
645 650 655

Gln Val Ser Tyr Glu Glu Tyr Leu Cys Met Lys Thr Leu Leu Leu  
660 665 670

Ser Ser Val Pro Lys Asp Gly Leu Lys Ser Gln Glu Leu Phe Asp Glu  
675 680 685

Ile Arg Met Thr Tyr Ile Lys Glu Leu Gly Lys Ala Ile Val Lys Arg  
690 695 700

Glu Gly Asn Ser Ser Gln Asn Trp Gln Arg Phe Tyr Gln Leu Thr Lys  
705 710 715 720

Leu Leu Asp Ser Met His Glu Val Val Glu Asn Leu Leu Asn Tyr Cys  
725 730 735

Phe Gln Thr Phe Leu Asp Lys Thr Met Ser Ile Glu Phe Pro Glu Met  
740 745 750

Leu Ala Glu Ile Ile Thr Asn Gln Leu Pro Lys Tyr Ser Asn Gly Asn  
755 760 765

Ile Lys Lys Leu Leu Phe His Gln Lys  
770 775

<210> 19  
<211> 795  
<212> PRT  
<213> Rattus norvegicus

<400> 19

Met Asp Ser Lys Glu Ser Leu Ala Pro Pro Gly Arg Asp Glu Val Pro  
1 5 10 15

Gly Ser Leu Leu Gly Gln Gly Arg Gly Ser Val Met Asp Phe Tyr Lys

20

25

30

Ser Leu Arg Gly Gly Ala Thr Val Lys Val Ser Ala Ser Ser Pro Ser  
35 40 45

Val Ala Ala Ala Ser Gln Ala Asp Ser Lys Gln Gln Arg Ile Leu Leu  
50 55 60

Asp Phe Ser Lys Gly Ser Thr Ser Asn Val Gln Gln Arg Gln Gln Gln  
65 70 75 80

Gln  
85 90 95

Pro Gly Leu Ser Lys Ala Val Ser Leu Ser Met Gly Leu Tyr Met Gly  
100 105 110

Glu Thr Glu Thr Lys Val Met Gly Asn Asp Leu Gly Tyr Pro Gln Gln  
115 120 125

Gly Gln Leu Gly Leu Ser Ser Gly Glu Thr Asp Phe Arg Leu Leu Glu  
130 135 140

Glu Ser Ile Ala Asn Leu Asn Arg Ser Thr Ser Val Pro Glu Asn Pro  
145 150 155 160

Lys Ser Ser Thr Ser Ala Thr Gly Cys Ala Thr Pro Thr Glu Lys Glu  
165 170 175

Phe Pro Lys Thr His Ser Asp Ala Ser Ser Glu Gln Gln Asn Arg Lys  
180 185 190

Ser Gln Thr Gly Thr Asn Gly Gly Ser Val Lys Leu Tyr Pro Thr Asp  
195 200 205

Gln Ser Thr Phe Asp Leu Leu Lys Asp Leu Glu Phe Ser Ala Gly Ser  
210 215 220

Pro Ser Lys Asp Thr Asn Glu Ser Pro Trp Arg Ser Asp Leu Leu Ile  
225 230 235 240

Asp Glu Asn Leu Leu Ser Pro Leu Ala Gly Glu Asp Asp Pro Phe Leu  
245 250 255

Leu Glu Gly Asn Thr Asn Glu Asp Cys Lys Pro Leu Ile Leu Pro Asp  
260 265 270

Thr Lys Pro Lys Ile Lys Asp Thr Gly Asp Thr Ile Leu Ser Ser Pro  
275 280 285

Ser Ser Val Ala Leu Pro Gln Val Lys Thr Glu Lys Asp Asp Phe Ile  
290 295 300

Glu Leu Cys Thr Pro Gly Val Ile Lys Gln Glu Lys Leu Gly Pro Val  
305 310 315 320

Tyr Cys Gln Ala Ser Phe Ser Gly Thr Asn Ile Ile Gly Asn Lys Met  
325 330 335

Ser Ala Ile Ser Val His Gly Val Ser Thr Ser Gly Gly Gln Met Tyr  
340 345 350

His Tyr Asp Met Asn Thr Ala Ser Leu Ser Gln Gln Asp Gln Lys  
355 360 365

Pro Val Phe Asn Val Ile Pro Pro Ile Pro Val Gly Ser Glu Asn Trp  
370 375 380

Asn Arg Cys Gln Gly Ser Gly Glu Asp Ser Leu Thr Ser Leu Gly Ala  
385 390 395 400

Leu Asn Phe Pro Gly Arg Ser Val Phe Ser Asn Gly Tyr Ser Ser Pro  
405 410 415

Gly Met Arg Pro Asp Val Ser Ser Pro Pro Ser Ser Ser Ala Ala  
420 425 430

Thr Gly Pro Pro Pro Lys Leu Cys Leu Val Cys Ser Asp Glu Ala Ser  
435 440 445

Gly Cys His Tyr Gly Val Leu Thr Cys Gly Ser Cys Lys Val Phe Phe  
450 455 460

Lys Arg Ala Val Glu Gly Gln His Asn Tyr Leu Cys Ala Gly Arg Asn  
465 470 475 480

Asp	Cys	Ile	Ile	Asp	Lys	Ile	Arg	Arg	Lys	Asn	Cys	Pro	Ala	Cys	Arg
485															495
Tyr	Arg	Lys	Cys	Leu	Gln	Ala	Gly	Met	Asn	Leu	Glu	Ala	Arg	Lys	Thr
500															510
Lys	Lys	Lys	Ile	Lys	Gly	Ile	Gln	Gln	Ala	Thr	Ala	Gly	Val	Ser	Gln
515															525
Asp	Thr	Ser	Glu	Asn	Pro	Asn	Lys	Thr	Ile	Val	Pro	Ala	Ala	Leu	Pro
530															540
Gln	Leu	Thr	Pro	Thr	Leu	Val	Ser	Leu	Leu	Glu	Val	Ile	Glu	Pro	Glu
545															560
Val	Leu	Tyr	Ala	Gly	Tyr	Asp	Ser	Ser	Val	Pro	Asp	Ser	Ala	Trp	Arg
565															575
Ile	Met	Thr	Thr	Leu	Asn	Met	Leu	Gly	Gly	Arg	Gln	Val	Ile	Ala	Ala
580															590
Val	Lys	Trp	Ala	Lys	Ala	Ile	Leu	Gly	Leu	Arg	Asn	Leu	His	Leu	Asp
595															605
Asp	Gln	Met	Thr	Leu	Leu	Gln	Tyr	Ser	Trp	Met	Phe	Leu	Met	Ala	Phe
610															620
Ala	Leu	Gly	Trp	Arg	Ser	Tyr	Arg	Gln	Ser	Ser	Gly	Asn	Leu	Leu	Cys
625															640
Phe	Ala	Pro	Asp	Leu	Ile	Ile	Asn	Glu	Gln	Arg	Met	Ser	Leu	Pro	Cys
645															655
Met	Tyr	Asp	Gln	Cys	Lys	His	Met	Leu	Phe	Val	Ser	Ser	Glu	Leu	Gln
660															670
Arg	Leu	Gln	Val	Ser	Tyr	Glu	Glu	Tyr	Leu	Cys	Met	Lys	Thr	Leu	Leu
675															685
Leu	Leu	Ser	Ser	Val	Pro	Lys	Glu	Gly	Leu	Lys	Ser	Gln	Glu	Leu	Phe
690															700

Asp Glu Ile Arg Met Thr Tyr Ile Lys Glu Leu Gly Lys Ala Ile Val  
705 710 715 720

Lys Arg Glu Gly Asn Ser Ser Gln Asn Trp Gln Arg Phe Tyr Gln Leu  
725 730 735

Thr Lys Leu Leu Asp Ser Met His Glu Val Val Glu Asn Leu Leu Thr  
740 745 750

Tyr Cys Phe Gln Thr Phe Leu Asp Lys Thr Met Ser Ile Glu Phe Pro  
755 760 765

Glu Met Leu Ala Glu Ile Ile Thr Asn Gln Ile Pro Lys Tyr Ser Asn  
770 775 780

Gly Asn Ile Lys Lys Leu Leu Phe His Gln Lys  
785 790 795

<210> 20  
<211> 783  
<212> PRT  
<213> Mus musculus

<400> 20

Met Asp Ser Lys Glu Ser Leu Ala Pro Pro Gly Arg Asp Glu Val Pro  
1 5 10 15

Ser Ser Leu Leu Gly Arg Gly Arg Gly Ser Val Met Asp Leu Tyr Lys  
20 25 30

Thr Leu Arg Gly Gly Ala Thr Val Lys Val Ser Ala Ser Ser Pro Ser  
35 40 45

Val Ala Ala Ala Ser Gln Ala Asp Ser Lys Gln Gln Arg Ile Leu Leu  
50 55 60

Asp Phe Ser Lys Gly Ser Ala Ser Asn Ala Gln Gln Gln Gln Gln Gln  
65 70 75 80

Gln Gln Pro Gln Pro Asp Leu Ser Lys Ala Val Ser Leu Ser Met Gly  
85 90 95

Leu Tyr Met Gly Glu Thr Glu Thr Lys Val Met Gly Asn Asp Leu Gly  
100 105 110

Tyr Pro Gln Gln Gly Gln Leu Gly Leu Ser Ser Gly Glu Thr Asp Phe  
115 120 125

Arg Leu Leu Glu Glu Ser Ile Ala Asn Leu Asn Arg Ser Thr Ser Arg  
130 135 140

Pro Glu Asn Pro Lys Ser Ser Thr Pro Ala Ala Gly Cys Ala Thr Pro  
145 150 155 160

Thr Glu Lys Glu Phe Pro Gln Thr His Ser Asp Pro Ser Ser Glu Gln  
165 170 175

Gln Asn Arg Lys Ser Gln Pro Gly Thr Asn Gly Gly Ser Val Lys Leu  
180 185 190

Tyr Thr Thr Asp Gln Ser Thr Phe Asp Ile Leu Gln Asp Leu Glu Phe  
195 200 205

Ser Ala Gly Ser Pro Gly Lys Glu Thr Asn Glu Ser Pro Trp Arg Ser  
210 215 220

Asp Leu Leu Ile Asp Glu Asn Leu Leu Ser Pro Leu Ala Gly Glu Asp  
225 230 235 240

Asp Pro Phe Leu Leu Glu Gly Asp Val Asn Glu Asp Cys Lys Pro Leu  
245 250 255

Ile Leu Pro Asp Thr Lys Pro Lys Ile Gln Asp Thr Gly Asp Thr Ile  
260 265 270

Leu Ser Ser Pro Ser Ser Val Ala Leu Pro Gln Val Lys Thr Glu Lys  
275 280 285

Asp Asp Phe Ile Glu Leu Cys Thr Pro Gly Val Ile Lys Gln Glu Lys  
290 295 300

Leu Gly Pro Val Tyr Cys Gln Ala Ser Phe Ser Gly Thr Asn Ile Ile  
305 310 315 320

Gly Asn Lys Met Ser Ala Ile Ser Val His Gly Val Ser Thr Ser Gly  
325 330 335

Gly Gln Met Tyr His Tyr Asp Met Asn Thr Ala Ser Leu Ser Gln Gln  
340 345 350

Gln Asp Gln Lys Pro Val Phe Asn Val Ile Pro Pro Ile Pro Val Gly  
355 360 365

Ser Glu Asn Trp Asn Arg Cys Gln Gly Ser Gly Glu Asp Asn Leu Thr  
370 375 380

Ser Leu Gly Ala Met Asn Phe Ala Gly Arg Ser Val Phe Ser Asn Gly  
385 390 395 400

Tyr Ser Ser Pro Gly Met Arg Pro Asp Val Ser Ser Pro Pro Ser Ser  
405 410 415

Ser Ser Thr Ala Thr Gly Pro Pro Lys Leu Cys Leu Val Cys Ser  
420 425 430

Asp Glu Ala Ser Val Cys His Tyr Gly Val Leu Thr Cys Gly Ser Cys  
435 440 445

Lys Val Phe Phe Lys Arg Ala Val Glu Gly Gln His Asn Tyr Leu Cys  
450 455 460

Ala Gly Arg Asn Asp Cys Ile Ile Asp Lys Ile Arg Arg Lys Asn Cys  
465 470 475 480

Pro Ala Cys Arg Tyr Arg Lys Cys Leu Gln Ala Gly Met Asn Leu Glu  
485 490 495

Ala Arg Lys Thr Lys Lys Ile Lys Gly Ile Gln Gln Ala Thr Ala  
500 505 510

Gly Val Ser Gln Asp Thr Ser Glu Asn Ala Asn Lys Thr Ile Val Pro  
515 520 525

Ala Ala Leu Pro Gln Leu Thr Pro Thr Leu Val Ser Leu Leu Glu Val  
530 535 540

Ile Glu Pro Glu Val Leu Tyr Ala Gly Tyr Asp Ser Ser Val Pro Asp  
545 550 555 560

Ser Ala Trp Arg Ile Met Thr Thr Leu Asn Met Leu Gly Gly Arg Gln  
565 570 575

Val Ile Ala Ala Val Lys Trp Ala Lys Ala Ile Pro Gly Phe Arg Asn  
580 585 590

Leu His Leu Asp Asp Gln Met Thr Leu Leu Gln Tyr Ser Trp Met Phe  
595 600 605

Leu Met Ala Phe Ala Leu Gly Trp Arg Ser Tyr Arg Gln Ala Ser Gly  
610 615 620

Asn Leu Leu Cys Phe Ala Pro Asp Leu Ile Ile Asn Glu Gln Arg Met  
625 630 635 640

Thr Leu Pro Cys Met Tyr Asp Gln Cys Lys His Met Leu Phe Ile Ser  
645 650 655

Thr Glu Leu Gln Arg Leu Gln Val Ser Tyr Glu Glu Tyr Leu Cys Met  
660 665 670

Lys Thr Leu Leu Leu Ser Ser Val Pro Lys Glu Gly Leu Lys Ser  
675 680 685

Gln Glu Leu Phe Asp Glu Ile Arg Met Thr Tyr Ile Lys Glu Leu Gly  
690 695 700

Lys Ala Ile Val Lys Arg Glu Gly Asn Ser Ser Gln Asn Trp Gln Arg  
705 710 715 720

Phe Tyr Gln Leu Thr Lys Leu Leu Asp Ser Met His Asp Val Val Glu  
725 730 735

Asn Leu Leu Ser Tyr Cys Phe Gln Thr Phe Leu Asp Lys Ser Met Ser  
740 745 750

Ile Glu Phe Pro Glu Met Leu Ala Glu Ile Ile Thr Asn Gln Ile Pro  
755 760 765

Lys Tyr Ser Asn Gly Asn Ile Lys Lys Leu Leu Phe His Gln Lys  
770 775 780

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<400> 21

Met Asp Ser Lys Glu Ser Leu Thr Pro Gly Arg Glu Glu Asn Pro Ser  
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Ser Val Leu Ala Gln Glu Arg Gly Asp Val Met Asp Phe Tyr Lys Thr  
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Leu Arg Gly Gly Ala Thr Val Lys Val Ser Ala Ser Ser Pro Ser Leu  
35 40 45

Ala Val Ala Ser Gln Ser Asp Ser Lys Gln Arg Arg Leu Leu Val Asp  
50 55 60

Phe Pro Lys Gly Ser Val Ser Asn Ala Gln Gln Pro Asp Leu Ser Lys  
65 70 75 80

Ala Val Ser Leu Ser Met Gly Leu Tyr Met Gly Glu Thr Glu Thr Lys  
85 90 95

Val Met Gly Asn Asp Leu Gly Phe Pro Gln Gln Gly Gln Ile Ser Leu  
100 105 110

Ser Ser Gly Glu Thr Asp Leu Lys Leu Leu Glu Glu Ser Ile Ala Asn  
115 120 125

Leu Asn Arg Ser Thr Ser Val Pro Glu Asn Pro Lys Ser Ser Ala Ser  
130 135 140

Thr Ala Val Ser Ala Ala Pro Thr Glu Lys Glu Phe Pro Lys Thr His  
145 150 155 160

Ser Asp Val Ser Ser Glu Gln Gln His Leu Lys Gly Gln Thr Gly Thr  
165 170 175

Asn Gly Gly Asn Val Lys Leu Tyr Thr Asp Gln Ser Thr Phe Asp  
180 185 190

Ile Leu Gln Asp Leu Glu Phe Ser Ser Gly Ser Pro Gly Lys Glu Thr  
195 200 205

Asn Glu Ser Pro Trp Arg Ser Asp Leu Leu Ile Asp Glu Asn Cys Leu  
210 215 220

Leu Ser Pro Leu Ala Gly Glu Asp Asp Ser Phe Leu Leu Glu Gly Asn  
225 230 235 240

Ser Asn Glu Asp Cys Lys Pro Leu Ile Leu Pro Asp Thr Lys Pro Lys  
245 250 255

Ile Lys Asp Asn Gly Asp Leu Val Leu Ser Ser Pro Ser Asn Val Thr  
260 265 270

Leu Pro Gln Val Lys Thr Glu Lys Glu Asp Phe Ile Glu Leu Cys Thr  
275 280 285

Pro Gly Val Ile Lys Gln Glu Lys Leu Gly Thr Val Tyr Cys Gln Ala  
290 295 300

Ser Phe Pro Gly Ala Asn Ile Ile Gly Asn Lys Met Ser Ala Ile Ser  
305 310 315 320

Val His Gly Val Ser Thr Ser Gly Gly Gln Met Tyr His Tyr Asp Met  
325 330 335

Asn Thr Ala Ser Leu Ser Gln Gln Asp Gln Lys Pro Ile Phe Asn  
340 345 350

Val Ile Pro Pro Ile Pro Val Gly Ser Glu Asn Trp Asn Arg Cys Gln  
355 360 365

Gly Ser Gly Asp Asp Asn Leu Thr Ser Leu Gly Thr Leu Asn Phe Pro  
370 375 380

Gly Arg Thr Val Phe Ser Asn Gly Tyr Ser Ser Pro Ser Met Arg Pro  
385 390 395 400

Asp Val Ser Ser Pro Pro Ser Ser Ser Thr Ala Thr Thr Gly Pro  
405 410 415

Pro Pro Lys Leu Cys Leu Val Cys Ser Asp Glu Ala Ser Gly Cys His  
420 425 430

Tyr Gly Val Leu Thr Cys Gly Ser Cys Lys Val Phe Phe Lys Arg Ala  
435 440 445

Val Glu Gly Gln His Asn Tyr Leu Cys Ala Gly Arg Asn Asp Cys Ile  
450 455 460

Ile Asp Lys Ile Arg Arg Lys Asn Cys Pro Ala Cys Arg Tyr Arg Lys  
465 470 475 480

Cys Leu Gln Ala Gly Met Asn Leu Glu Ala Arg Lys Thr Lys Lys Lys  
485 490 495

Ile Lys Gly Ile Gln Gln Ala Thr Thr Gly Val Ser Gln Glu Thr Ser  
500 505 510

Glu Asn Pro Gly Asn Lys Thr Ile Val Pro Ala Thr Leu Pro Gln Leu  
515 520 525

Thr Pro Thr Leu Val Ser Leu Leu Glu Val Ile Glu Pro Glu Val Leu  
530 535 540

Tyr Ala Gly Tyr Asp Ser Ser Val Pro Asp Ser Thr Trp Arg Ile Met  
545 550 555 560

Thr Thr Leu Asn Met Leu Gly Gly Arg Gln Val Ile Ala Ala Val Lys  
565 570 575

Trp Ala Lys Ala Ile Pro Gly Phe Arg Asn Leu His Leu Asp Asp Gln  
580 585 590

Met Thr Leu Leu Gln Tyr Ser Trp Met Phe Leu Met Ala Phe Ala Leu  
595 600 605

Gly Trp Arg Ser Tyr Arg Gln Ser Ser Ala Asn Leu Leu Cys Phe Ala  
610 615 620

Pro Asp Leu Ile Ile Asn Glu Gln Arg Met Thr Leu Pro Cys Met Tyr  
625 630 635 640

Asp Gln Cys Lys His Met Leu Tyr Val Ser Ser Glu Leu His Arg Leu  
645 650 655

Gln Val Ser Tyr Glu Glu Tyr Leu Cys Met Lys Thr Leu Leu Leu

660

665

670

Ser Ser Val Pro Lys Asp Gly Leu Lys Ser Gln Glu Leu Phe Asp Glu  
675 680 685

Ile Arg Met Thr Tyr Ile Lys Glu Leu Gly Lys Ala Ile Val Lys Arg  
690 695 700

Glu Gly Asn Ser Ser Gln Asn Trp Gln Arg Phe Tyr Gln Leu Thr Lys  
705 710 715 720

Leu Leu Asp Ser Met His Glu Val Val Glu Asn Leu Leu Asn Tyr Cys  
725 730 735

Phe Gln Thr Phe Leu Asp Lys Thr Met Ser Ile Glu Phe Pro Glu Met  
740 745 750

Leu Ala Glu Ile Ile Thr Asn Gln Ile Pro Lys Tyr Ser Asn Gly Asn  
755 760 765

Ile Lys Lys Leu Leu Phe His Gln Lys  
770 775